FIG. 1

Prior Art

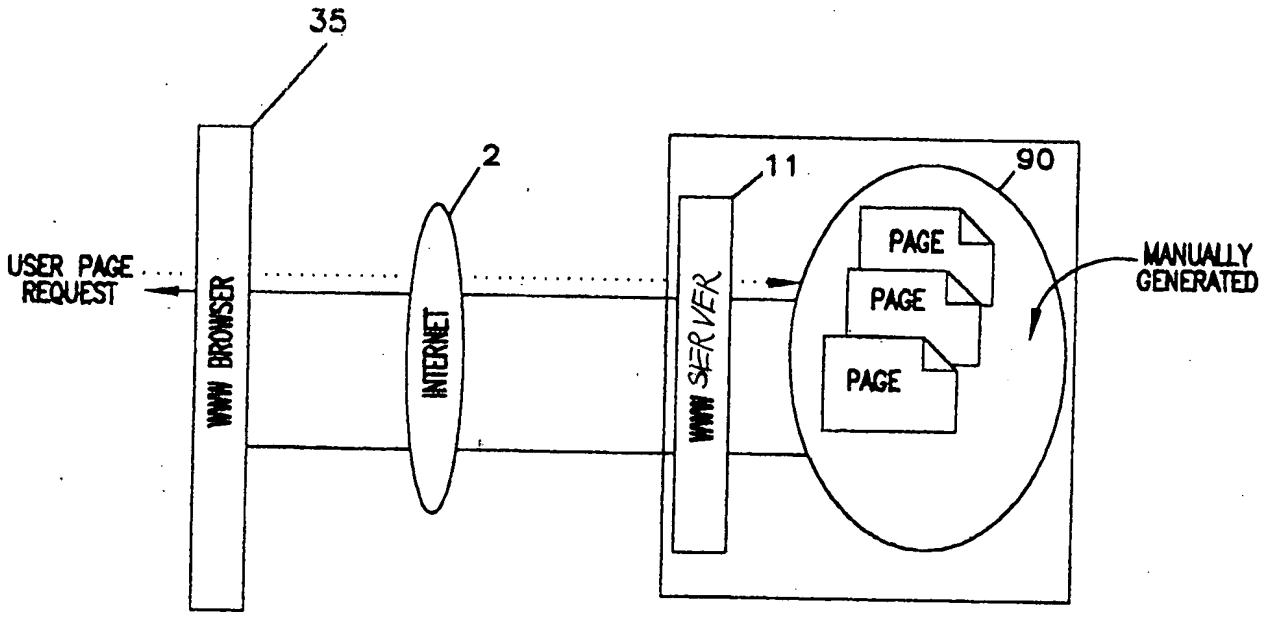


FIG. 2

Prior Art

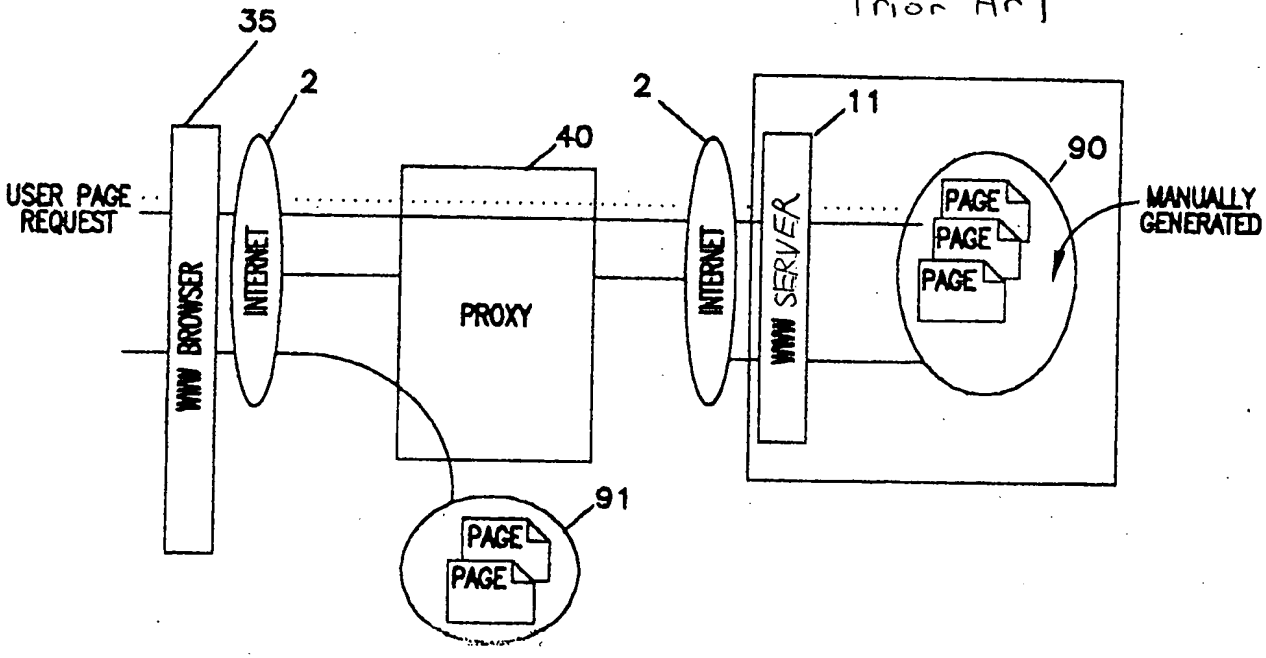


FIG. 3 Prior Art

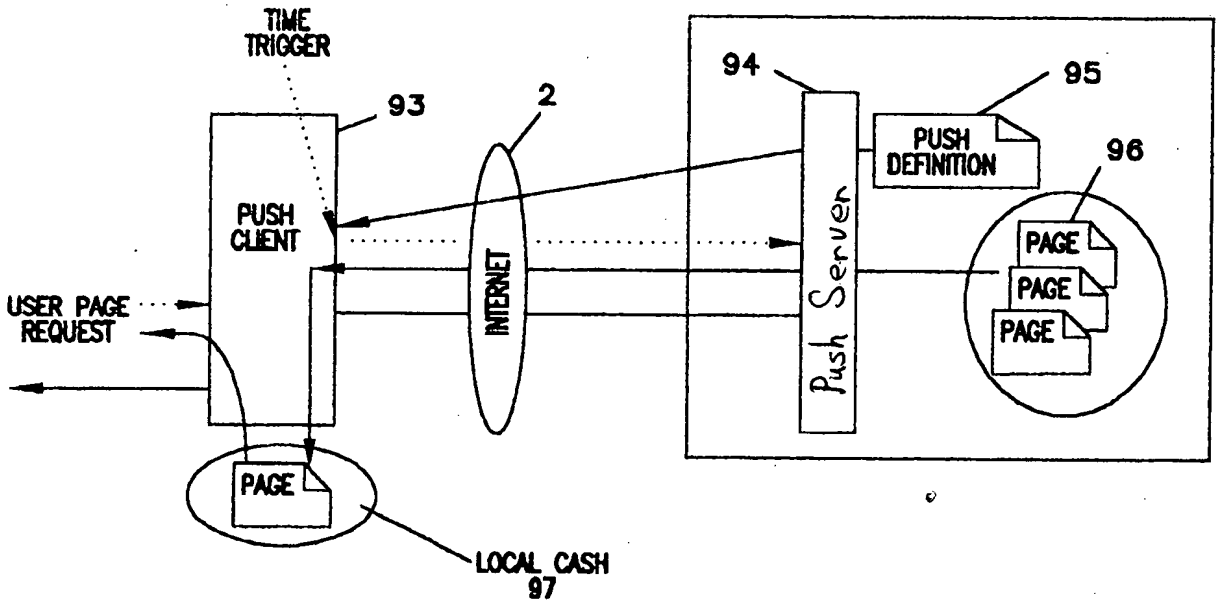
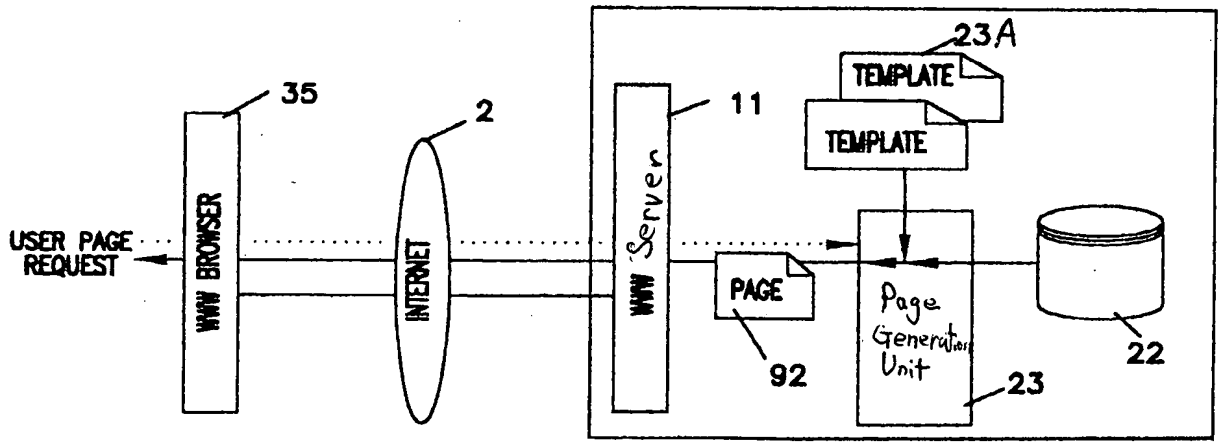
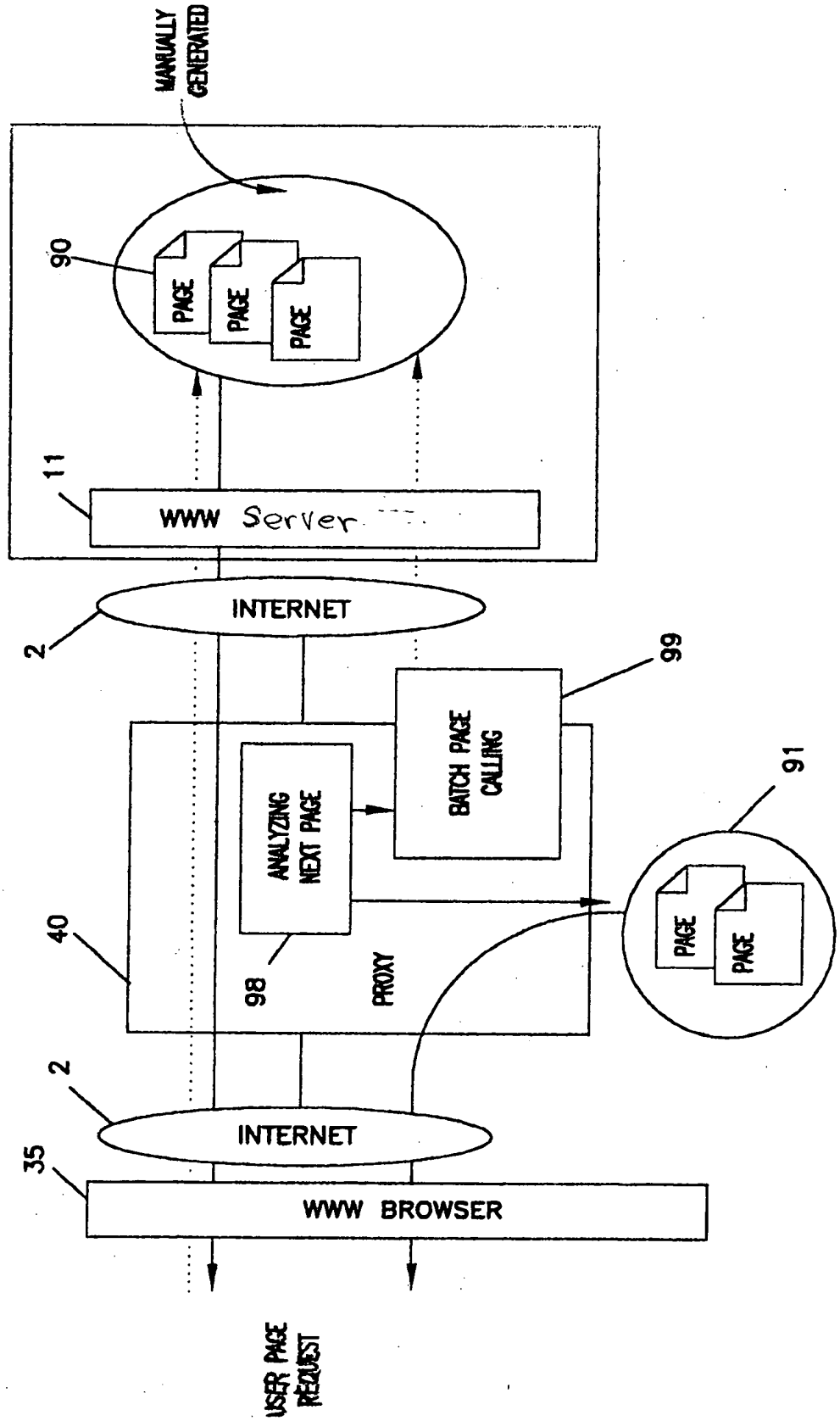


FIG. 5 Prior Art





Prior Art

FIG. 4

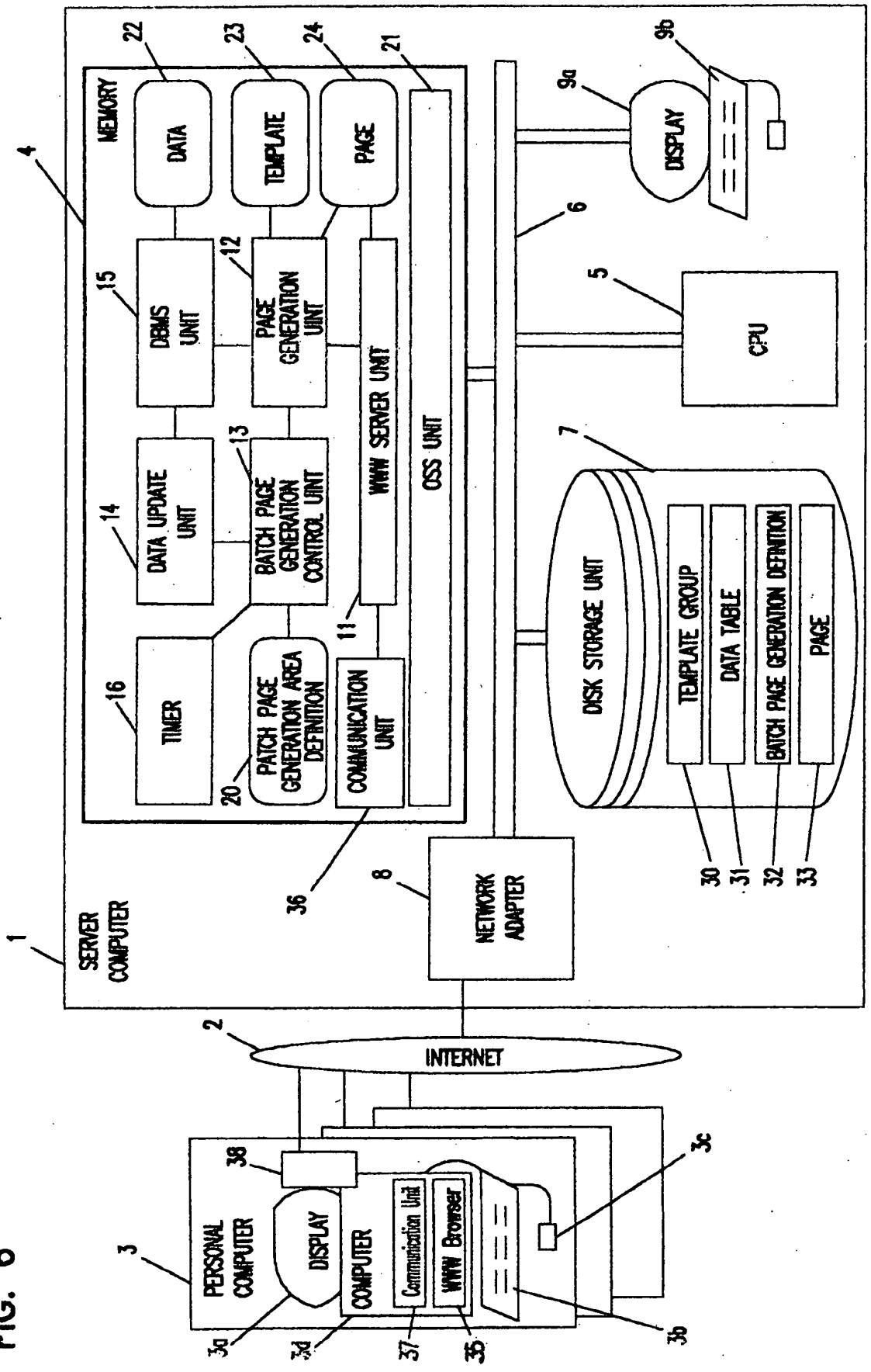

SERVER COMPUTER
1
MEMORY
4
DATA
22
TEMPLATE
23
PAGE
24
OSS UNIT
21
DBMS UNIT
15
PAGE GENERATION UNIT
12
WWW SERVER UNIT
11
DATA UPDATE UNIT
14
BATCH PAGE GENERATION CONTROL UNIT
13
TIMER
16
PATCH PAGE GENERATION AREA DEFINITION
20
COMMUNICATION UNIT
36
NETWORK ADAPTER
8
DISPLAY
9a
9b
CPU
5
6
DISK STORAGE UNIT
7
TEMPLATE GROUP
30
DATA TABLE
31
BATCH PAGE GENERATION DEFINITION
32
PAGE
33
INTERNET
2
PERSONAL COMPUTER
3
DISPLAY
3a
COMPUTER
38
Communication Unit
37
WWW Browser
35
3b
3c

FIG. 6

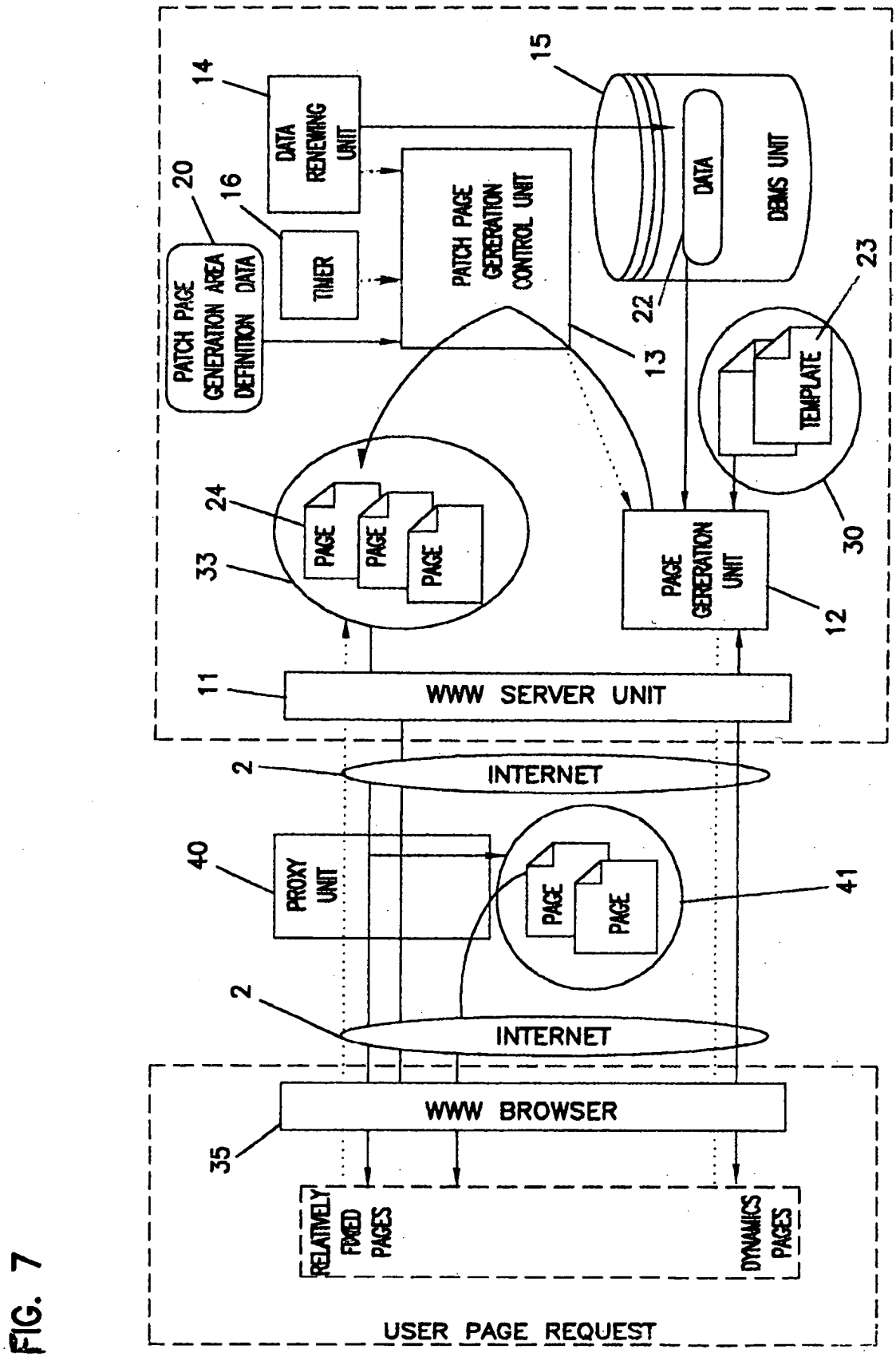

DATA RENEWING UNIT
14
15
DATA
DBMS UNIT
20
16
PATCH PAGE GENERATION AREA DEFINITION DATA
TIMER
PATCH PAGE GENERATION CONTROL UNIT
22
23
13
TEMPLATE
24
PAGE
PAGE
PAGE
33
PAGE GENERATION UNIT
30
12
11
WWW SERVER UNIT
2
INTERNET
40
PROXY UNIT
PAGE
PAGE
41
2
INTERNET
WWW BROWSER
35
RELATIVELY FIXED PAGES
DYNAMICS PAGES
USER PAGE REQUEST

FIG. 7

FIG. 8

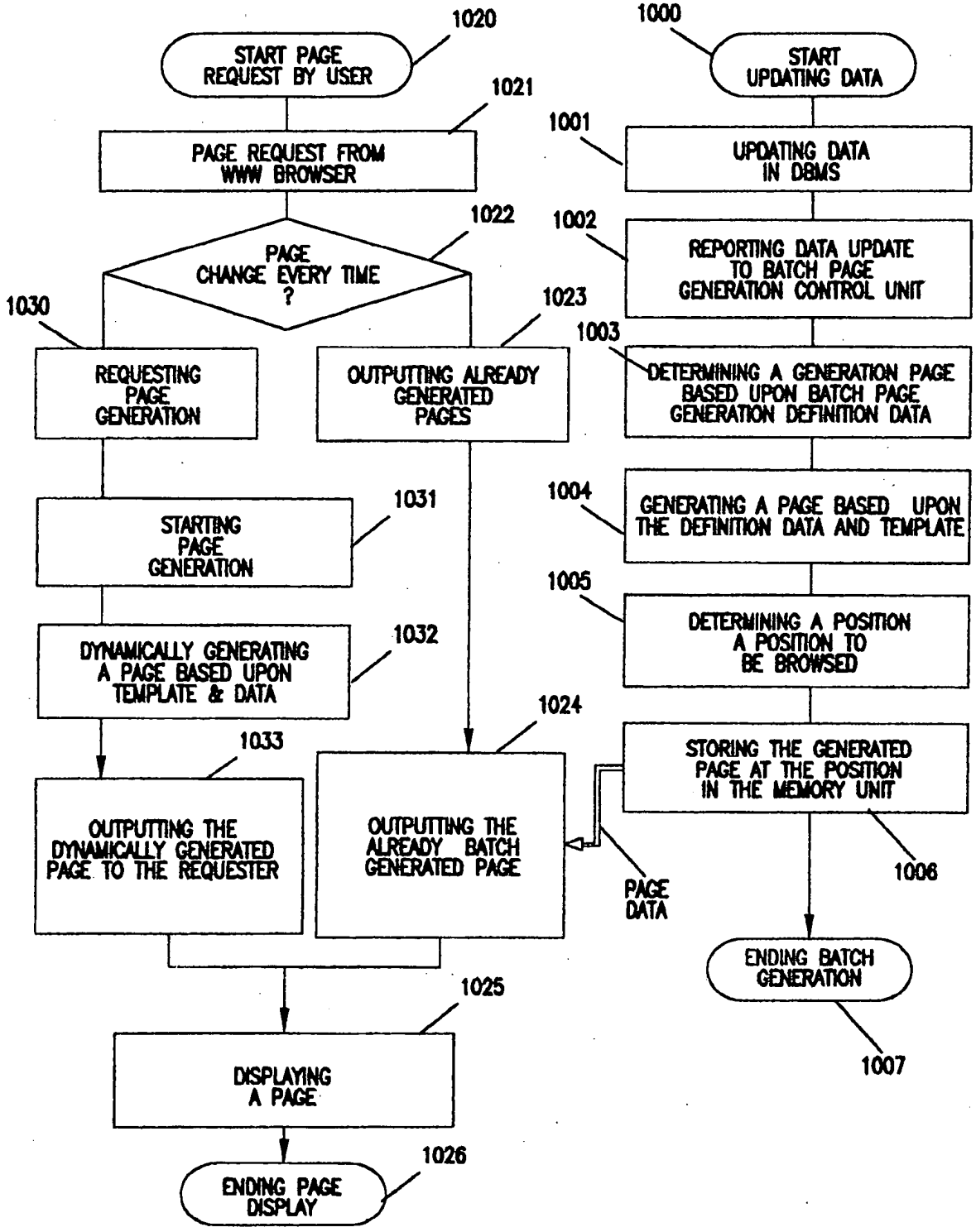

1020
START PAGE REQUEST BY USER
1021
PAGE REQUEST FROM WWW BROWSER
1022
PAGE CHANGE EVERY TIME ?
1030
REQUESTING PAGE GENERATION
1023
OUTPUTTING ALREADY GENERATED PAGES
1031
STARTING PAGE GENERATION
1032
DYNAMICALLY GENERATING A PAGE BASED UPON TEMPLATE & DATA
1033
OUTPUTTING THE DYNAMICALLY GENERATED PAGE TO THE REQUESTER
1024
OUTPUTTING THE ALREADY BATCH GENERATED PAGE
1025
DISPLAYING A PAGE
1026
ENDING PAGE DISPLAY
1000
START UPDATING DATA
1001
UPDATING DATA IN DBMS
1002
REPORTING DATA UPDATE TO BATCH PAGE GENERATION CONTROL UNIT
1003
DETERMINING A GENERATION PAGE BASED UPON BATCH PAGE GENERATION DEFINITION DATA
1004
GENERATING A PAGE BASED UPON THE DEFINITION DATA AND TEMPLATE
1005
DETERMINING A POSITION A POSITION TO BE BROWSED
STORING THE GENERATED PAGE AT THE POSITION IN THE MEMORY UNIT
1006
PAGE DATA
ENDING BATCH GENERATION
1007

FIG. 9

PATCH PAGE
GENERATION DEFINITIONS 70

ID.	TRIGGER TYPE	TRIGGERING CONDITIONS	PATCH PAGE GENERATION COMMAND	GENERATED PAGE NAME
1)	TIME	EVERY 6 AM	page TEMPLATE = c. html	c_g_.html
2)	DATA UPDATE	UPDATE ON PRODUCT A	page TEMPLATE = a. html & ITEM = 1000a	a_g_100a.html
3)	TEMPLATE UPDATE	a. html UPDATE	page TEMPLATE = a. html & ITEM = *	a_ g_*.html
4)		.....		
		.....		

71
73

FROM : FAX NO. : 8926275 Mar. 01 2000 08:30PM P7

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4000 A

FIG.10

```
<HTML>
<head> <title> Product Search Page <title> <head>                                   40001
<BODY>
<!@EXEC INTERFACE=PDBManager=Get Anchor
PARAM=("STORE ID|PRODUCT ID|PRODUCT NAME|MANUFACTURER|PRICE|MANUFACTURER  :|RETAIL SUGGESTED PRICE|KEYWORD
      "$CONDITION", "KEYWORD", 0, 0, 1, 3)
RECORD=REC>
<CENTER>                                                                            40002
<B><FONT COLOR="#3333FE"><H1>PRODUCT SEARCH</H1></FONT></B>
<b>No OF SEARCHED ITEMS $COUNT </b><br>
<table border="5" cellpadding=" 3" cellspacing="0">
        <tr>    <td width =20%>
                <h4><b>selected item</b></h4>
                </td>
                <td width=80% align="center">                                       40004
                <h4><b>selecting candidates</b></h4>
                <td>                                                    40003
        </tr><tr>
                <td width>.<b4><b>classification</b></h4> </td>
                <td> | <!@EXEC INTERFACE=PDBManager METHOD=Get Anchor
                     PARAM=(CLASSIFICATION", "$CONDITION", "$KEYWORD", 1, "????", 0, 0, 1, 1>
                     RECORD=REC>
                     <!@REPEAT RECORD=REC>
                          <A href="/cgi-bin/page?SHOP ID=$SHOP ID&TEMPLATE=mcsearchmain.html
                            &KEYWORD=<#ENCODE($KEYWORD)>&CONDITION=<#ENCODE($NCOND)>">
                          $VALUE</A>
                     <!/REPEAT>
                </td>
    </tr><tr>                                                   40007  40006  40005
                <td width>.<h4><b>sub classificationi</b></h4> </td>
                <td> | <!@EXEC INTERFACE=PDBManageer METHOD=GetAnchor
                     PARAM=("????", "CONDITION", "$KEYWORD", 1, "????", 0, 0, 1, 1)
                     RECORD=REC>
                     <!@REPEAT RECORD REC>
                          <A href="/cgi-bin/page?SHOP ID=$SHOP ID&TEMPLATE=mcsearchmain.html
                           &KEYWORD=<#ENCODE($KEYWORD)>&CONDITION=<#ENCODE($NCOND)>">
                          $VALUE</A>
                     <!/REPEAT>
                </td>
     </tr><tr>
                <td><h4><b>????(?)</b></h4>                                 </td>
                <td>  <!@EXEC INTERFACE=PDBManager METHOD=Get Anchor
                     PARAM=("PRICE", "$CONDITION", "$KEYWORD", 2, "PRICE", 0, 0, 1, 2>
                     RECORD=REC>
                     <!@REPEAT RECORD REC>
                          <A href="/cgi-bin/page?SHOP ID=$SHOP ID&TEMPLATE=mcsearchmain.html
                            &KEYWORD=<#ENCODE($KEYWORD)>&CONDITION=<#ENCODE($NCOND)>">
                          $VALUE1 ~ $VALUE2</A>
                     <!/REPEAT>
                </td>
     <tr>
</table>
</center>
</body>
</html>
```

FIG. 11

4000B

```
<HTML>
<head> <title>PRODUCT SEARCH PAGE</title> </head>

<BODY>
<CENTER>
<B><FONT COLOR="#3333FF"><H1>PRODUCT SEARCH</H1><FONT></B>
<b>No. OF SEARCHED ITEMS 184 </b><br>

<table border="5" cellpadding="3" cellspacing="0"
        <tr>      <td width=20%>
                  <h4><b>SELECTION </B></H4>
                  <td>
                  <td width=80% align="center">
                  <h4><b>Selection Candidates</b></h4>
                  </td>
        </tr> <tr>
                  <td>
                   <h4><b>classification</b></h4>
                  </td>
                  <td>
                    <A href="/cgi-bin/page?SHOP ID=a-SHOP ID&TEMPLATE=mcsearchmain.html
                          &KEYWORD=&CONDITION=%91%E5%95%AA%97%DE+
                          =+%27PDF%95%B6%8F%91?">
                    TEXT </A>
                    <A href="/cgi-bin/page?SHOP ID=a-SHOP ID&TEMPLATE=mcsearchmain.html
                          &KEYWORD=&CONDITION=%91%E5%95%AA%97%DE+
                          =+%27%83v%83%8A%83y%83C%83h%83J%81%5B%83h%27">
                    VOICE</A>
                    <A href="/cgi-bin/page?SHOP ID=a-SHOP ID&TEMPLATE=mcsearchmain.html
                          &KEYWORD=&CONDITION=%91%E5%95%AA%97%DE+
                          =+%27%89%E6%91%9C%27">
                    IMAGE </A>
                    <A href="/cgi-bin/page?SHOP ID=a-SHOP ID&TEMPLATE=mcsearchmain.html
                          &KEYWORD=&CONDITION=%91%E5%95%AA%97%DE+
                          =+%27%93%AE%89%E6%27">
                    ANIMATION </A>
                  </td>
        </tr>

              ...     ....
```

FIG. 12

PRODUCT SEARCH

NO. OF SEARCHED ITEMS 184

	SELECTION	SELECTION CANDIDATE
50	CLASSIFICATION	TEXT VOICE IMAGE ANIMATION
51	SUB CLASSIFICATION	Apple Classics SOUND TRACK PUZZLE POPULAR EUROPE ROCH FLOWERS BACKGROUND MUSIC AUTOMOBILE ANIMAL
52	SUGGESTED RETAIL PRICE (YEN)	0 ~ 49 50 ~ 99 100 ~ 299 300 ~ 499 500 ~ 4999 5000 ~ 9999

FROM : FAX NO. : 8926275 Mar. 01 2000 08:33PM P10

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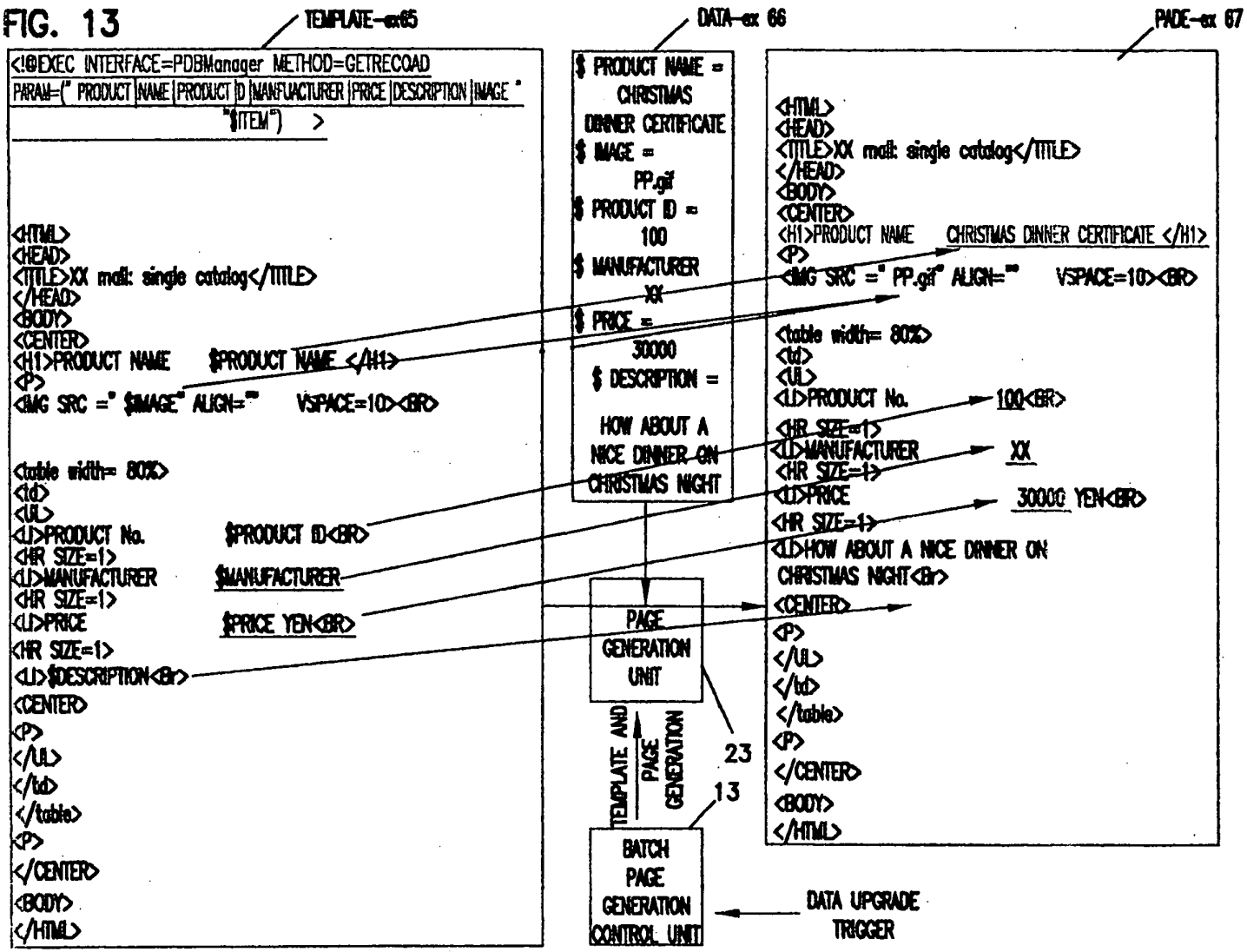
FIG. 13



FROM : FAX NO. : 8926275 Mar. 01 2000 08:33PM P11

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FIG. 14

PRODUCT DATA TABLE

PRODUCT I.D.	STORE I.D.	PRODUCT NAME	MANUFACTURER	PRICE	MEMBER PRICE	IMAGE	DESCRIPTION
....							
1000a	AA	CHRISTMAS DINNER CENTERPIECE	XX	30000	25000	FP.gif	CHRISTMAS
1000b	BB	CHRISTMAS CAKE	YY	4000	3000	FL.gif	SHEET CAKE
....							

61
52

FIG. 15

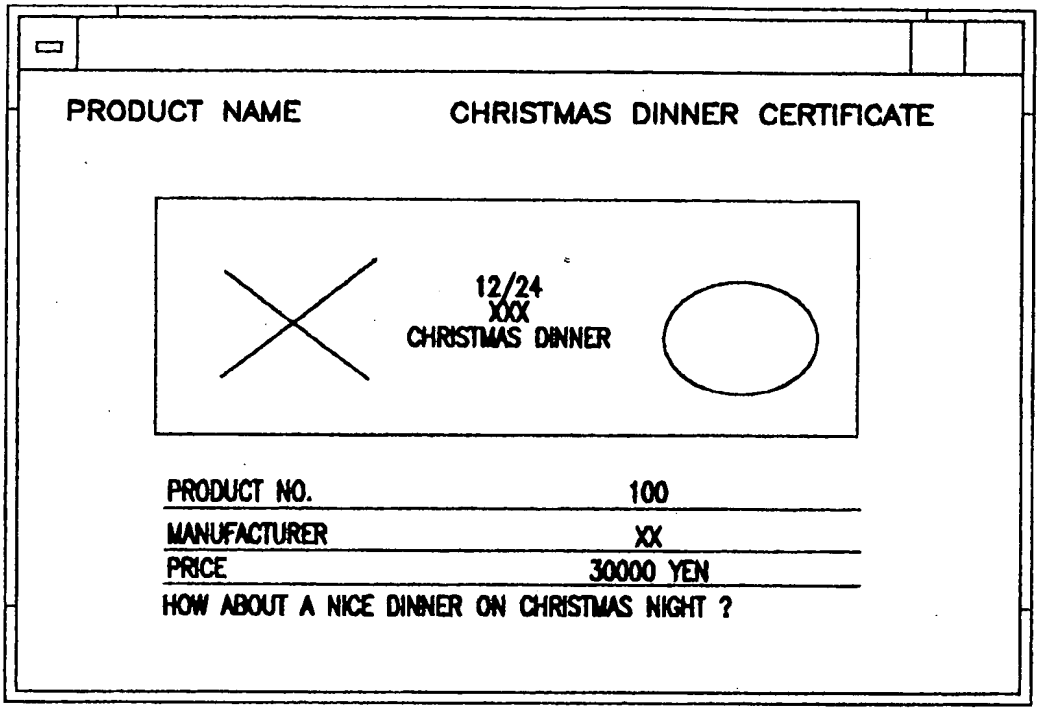
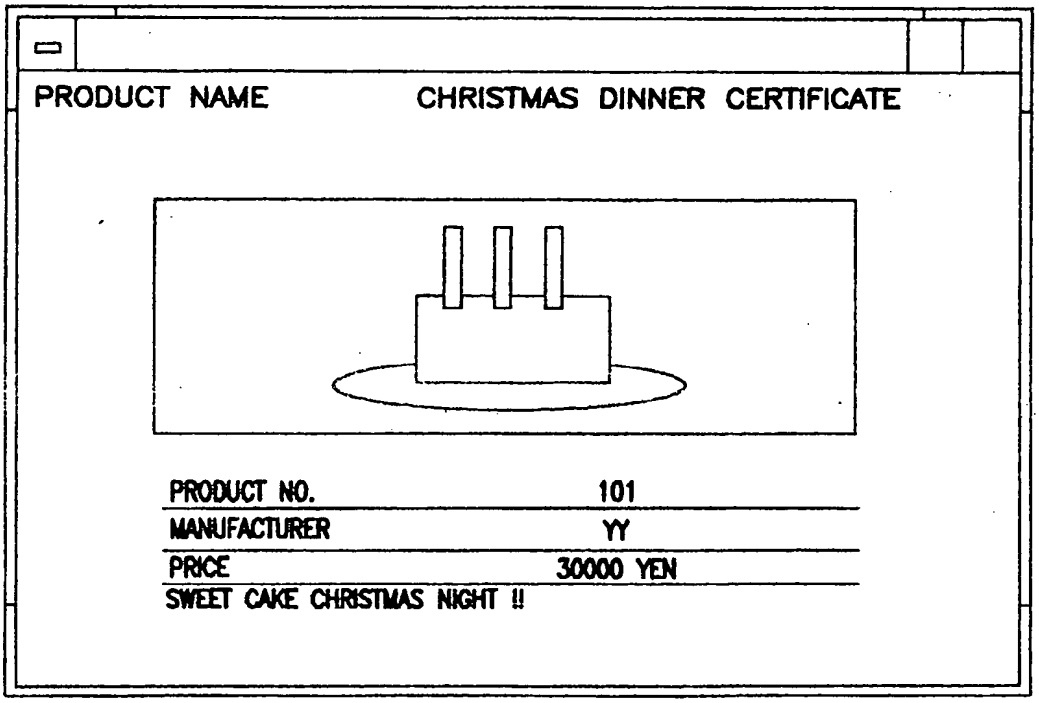

PRODUCT NAME
CHRISTMAS DINNER CERTIFICATE
12/24
XXX
CHRISTMAS DINNER
PRODUCT NO. 100
MANUFACTURER XX
PRICE 30000 YEN
HOW ABOUT A NICE DINNER ON CHRISTMAS NIGHT ?

FIG. 16


PRODUCT NAME
CHRISTMAS DINNER CERTIFICATE
PRODUCT NO. 101
MANUFACTURER YY
PRICE 30000 YEN
SWEET CAKE CHRISTMAS NIGHT !!

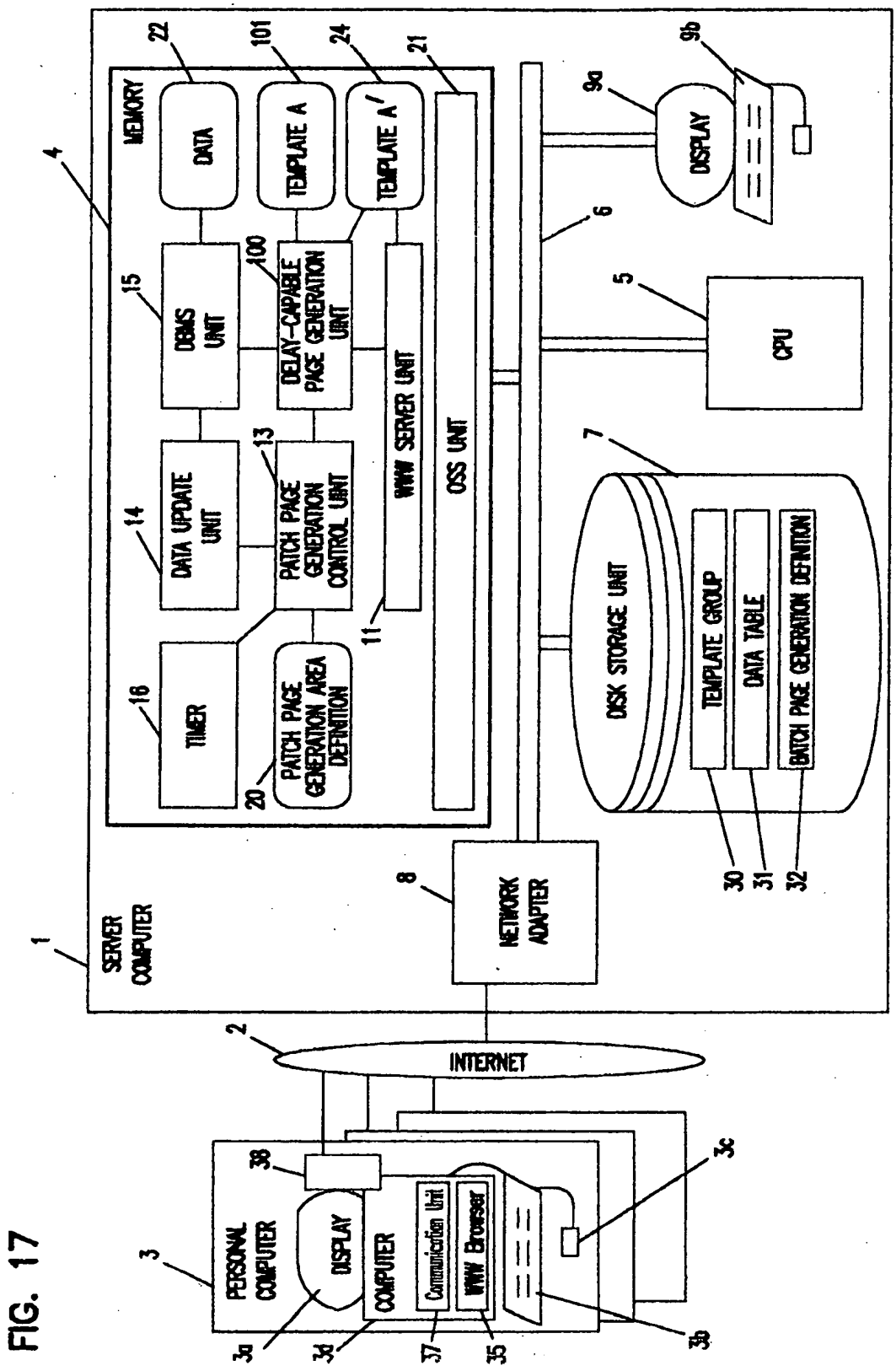

SERVER COMPUTER
1
MEMORY
4
DATA
22
TEMPLATE A
101
TEMPLATE A'
24
21
DBMS UNIT
15
DELAY-CAPABLE PAGE GENERATION UNIT
100
WWW SERVER UNIT
11
OSS UNIT
DATA UPDATE UNIT
14
PATCH PAGE GENERATION CONTROL UNIT
13
TIMER
16
PATCH PAGE GENERATION AREA DEFINITION
20
NETWORK ADAPTER
8
6
DISPLAY
9a
9b
CPU
5
DISK STORAGE UNIT
7
TEMPLATE GROUP
DATA TABLE
BATCH PAGE GENERATION DEFINITION
30
31
32
INTERNET
2
PERSONAL COMPUTER
3
DISPLAY
3a
COMPUTER
3b
Communication Unit
37
WWW Browser
35
3c
38

FIG. 17

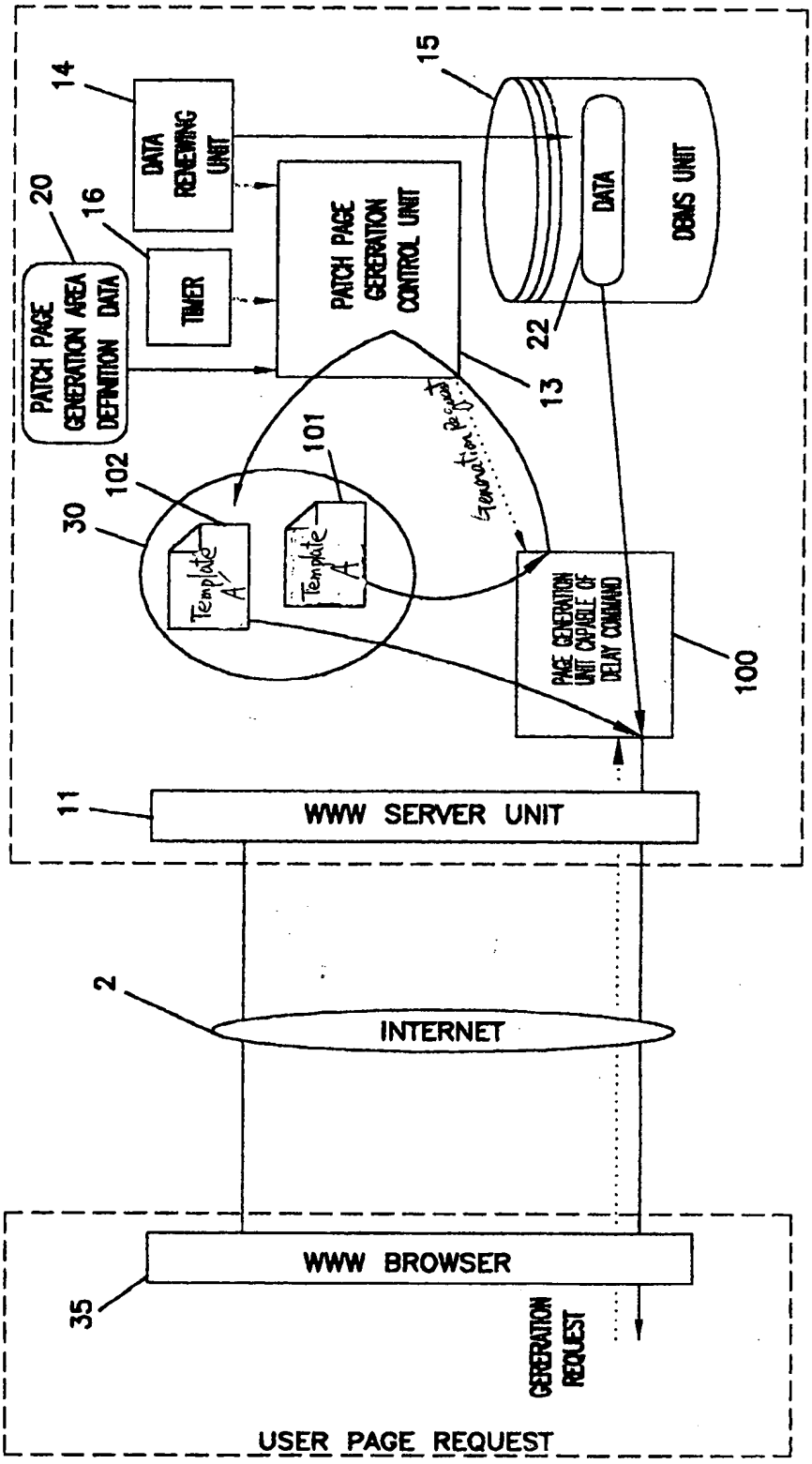
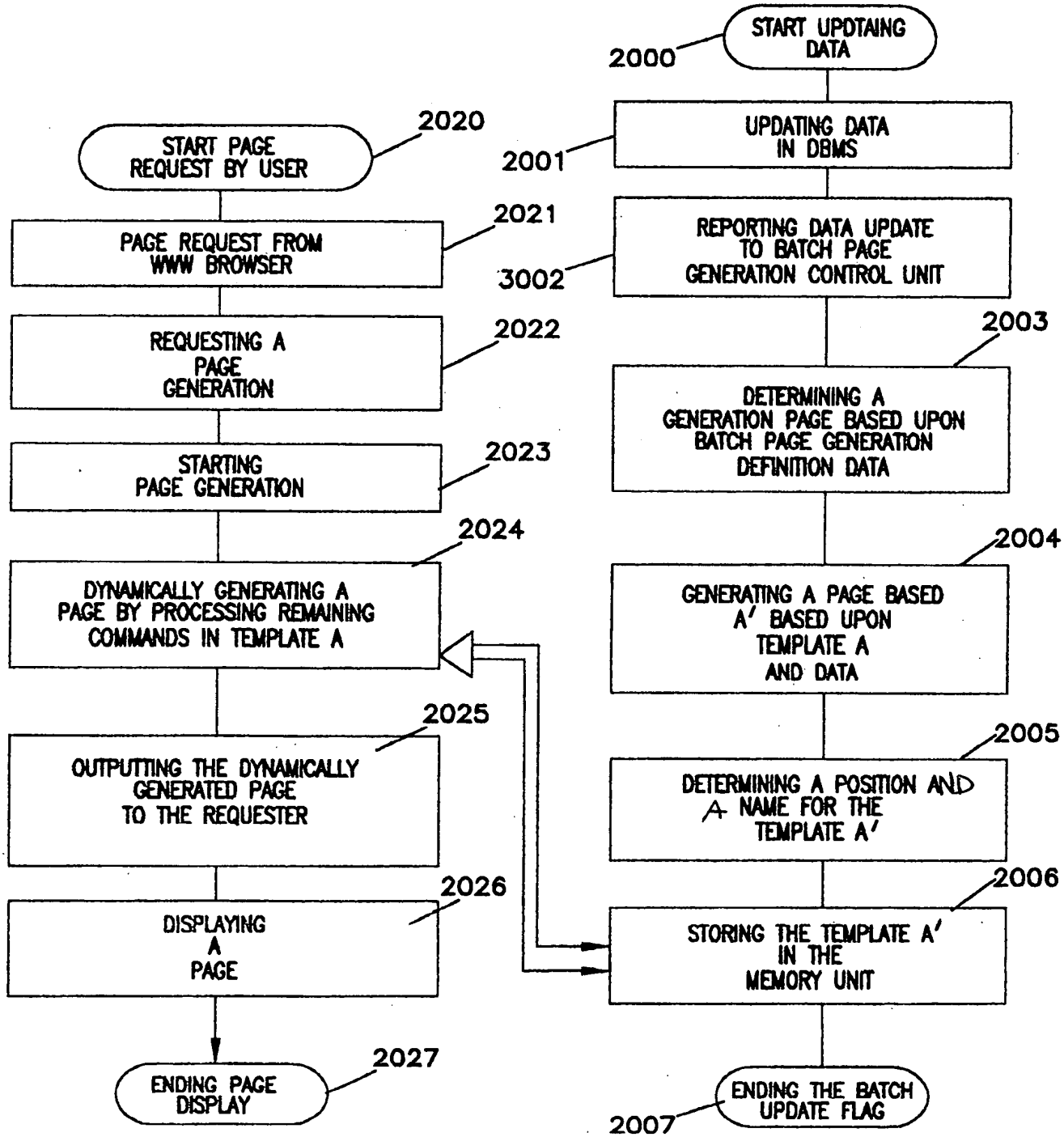

14
DATA RENEWING UNIT
15
DATA
DBMS UNIT
20
16
PATCH PAGE GENERATION AREA DEFINITION DATA
TIMER
PATCH PAGE GENERATION CONTROL UNIT
22
13
generation request
101
102
30
Template A
Template A
PAGE GENERATION UNIT CAPABLE OF DELAY COMMAND
100
11
WWW SERVER UNIT
2
INTERNET
WWW BROWSER
35
GENERATION REQUEST
USER PAGE REQUEST

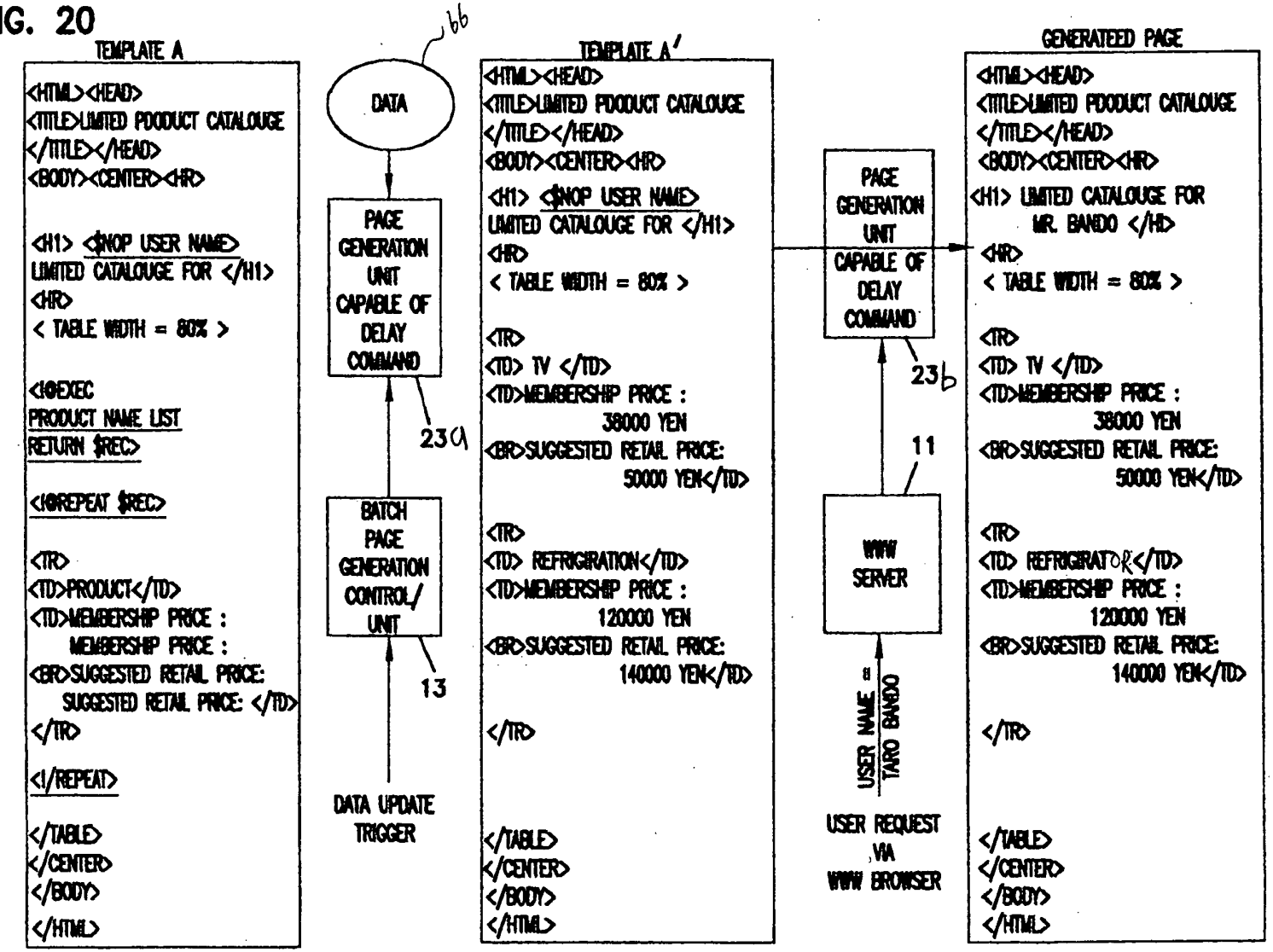
FIG. 18

FIG. 19


START UPDTAING DATA
2000
UPDATING DATA IN DBMS
2001
REPORTING DATA UPDATE TO BATCH PAGE GENERATION CONTROL UNIT
3002
DETERMINING A GENERATION PAGE BASED UPON BATCH PAGE GENERATION DEFINITION DATA
2003
GENERATING A PAGE BASED A' BASED UPON TEMPLATE A AND DATA
2004
DETERMINING A POSITION AND A NAME FOR THE TEMPLATE A'
2005
STORING THE TEMPLATE A' IN THE MEMORY UNIT
2006
ENDING THE BATCH UPDATE FLAG
2007
START PAGE REQUEST BY USER
2020
PAGE REQUEST FROM WWW BROWSER
2021
REQUESTING A PAGE GENERATION
2022
STARTING PAGE GENERATION
2023
DYNAMICALLY GENERATING A PAGE BY PROCESSING REMAINING COMMANDS IN TEMPLATE A
2024
OUTPUTTING THE DYNAMICALLY GENERATED PAGE TO THE REQUESTER
2025
DISPLAYING A PAGE
2026
ENDING PAGE DISPLAY
2027

FROM : FAX NO. : 8926275 Mar. 01 2000 08:38PM P17

FIG. 20



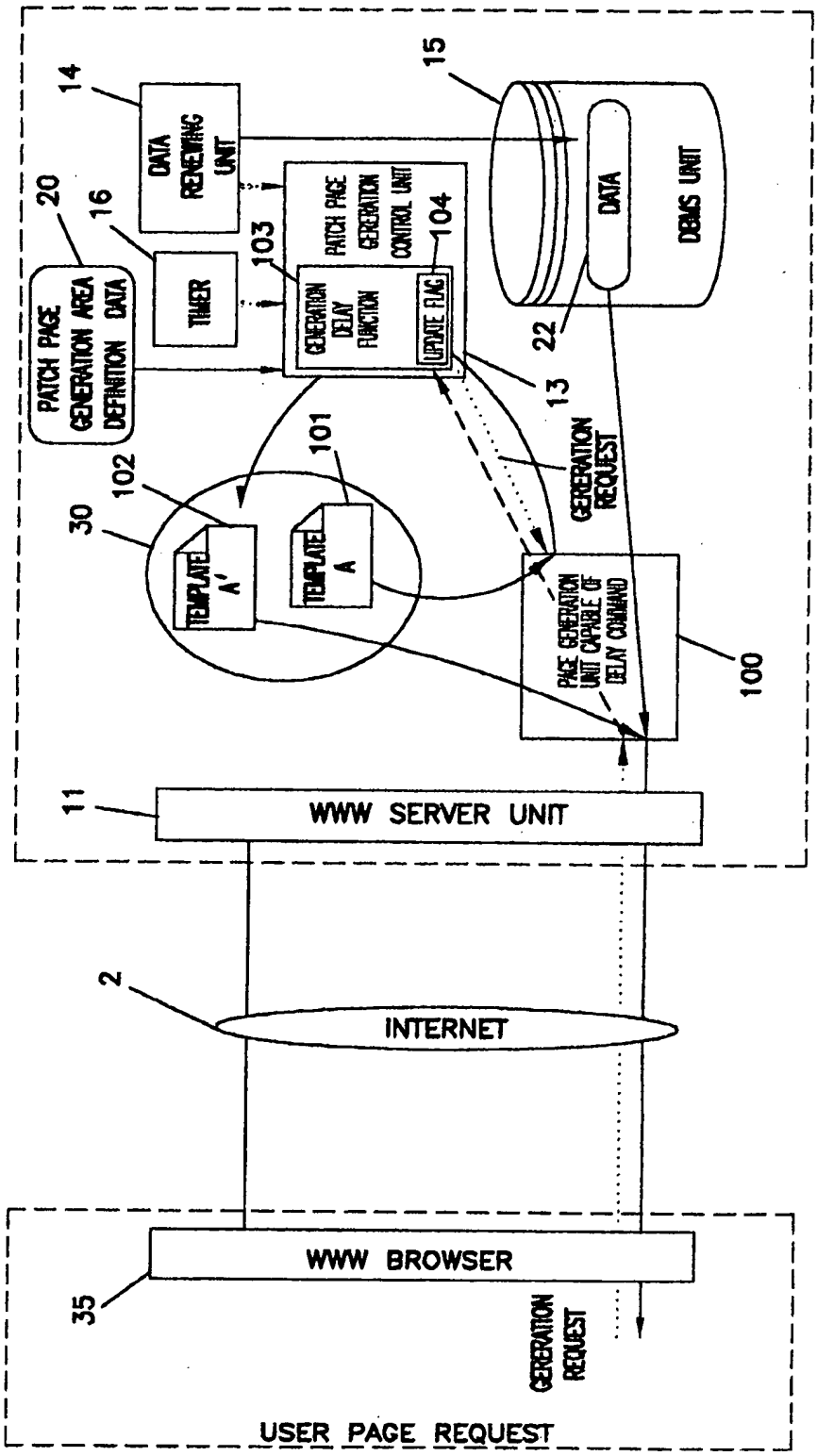
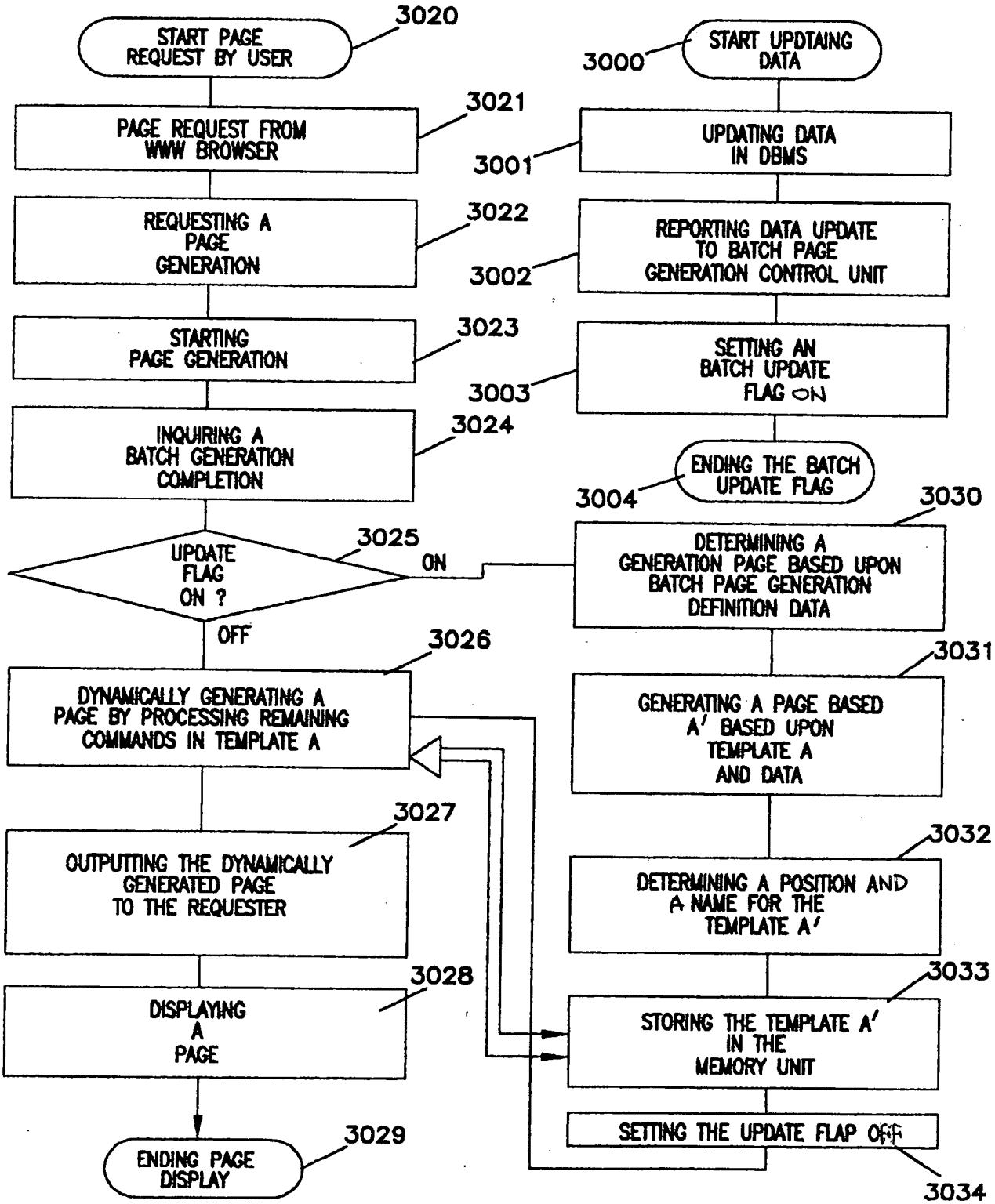

14
DATA RENEWING UNIT
15
DATA
DBMS UNIT
20
PATCH PAGE GENERATION AREA DEFINITION DATA
16
TIMER
103
PATCH PAGE GENERATION CONTROL UNIT
104
GENERATION DELAY FUNCTION
UPDATE FLAG
22
13
GENERATION REQUEST
101
102
30
TEMPLATE A'
TEMPLATE A
PAGE GENERATION UNIT CAPABLE OF DELAY COMMAND
100
11
WWW SERVER UNIT
2
INTERNET
35
WWW BROWSER
GENERATION REQUEST
USER PAGE REQUEST

FIG. 21

FIG. 22


START PAGE REQUEST BY USER
3020
PAGE REQUEST FROM WWW BROWSER
3021
REQUESTING A PAGE GENERATION
3022
STARTING PAGE GENERATION
3023
INQUIRING A BATCH GENERATION COMPLETION
3024
UPDATE FLAG ON ?
3025
ON
OFF
DYNAMICALLY GENERATING A PAGE BY PROCESSING REMAINING COMMANDS IN TEMPLATE A
3026
OUTPUTTING THE DYNAMICALLY GENERATED PAGE TO THE REQUESTER
3027
DISPLAYING A PAGE
3028
ENDING PAGE DISPLAY
3029
START UPDTAING DATA
3000
UPDATING DATA IN DBMS
3001
REPORTING DATA UPDATE TO BATCH PAGE GENERATION CONTROL UNIT
3002
SETTING AN BATCH UPDATE FLAG ON
3003
ENDING THE BATCH UPDATE FLAG
3004
DETERMINING A GENERATION PAGE BASED UPON BATCH PAGE GENERATION DEFINITION DATA
3030
GENERATING A PAGE BASED A' BASED UPON TEMPLATE A AND DATA
3031
DETERMINING A POSITION AND A NAME FOR THE TEMPLATE A'
3032
STORING THE TEMPLATE A' IN THE MEMORY UNIT
3033
SETTING THE UPDATE FLAP OFF
3034

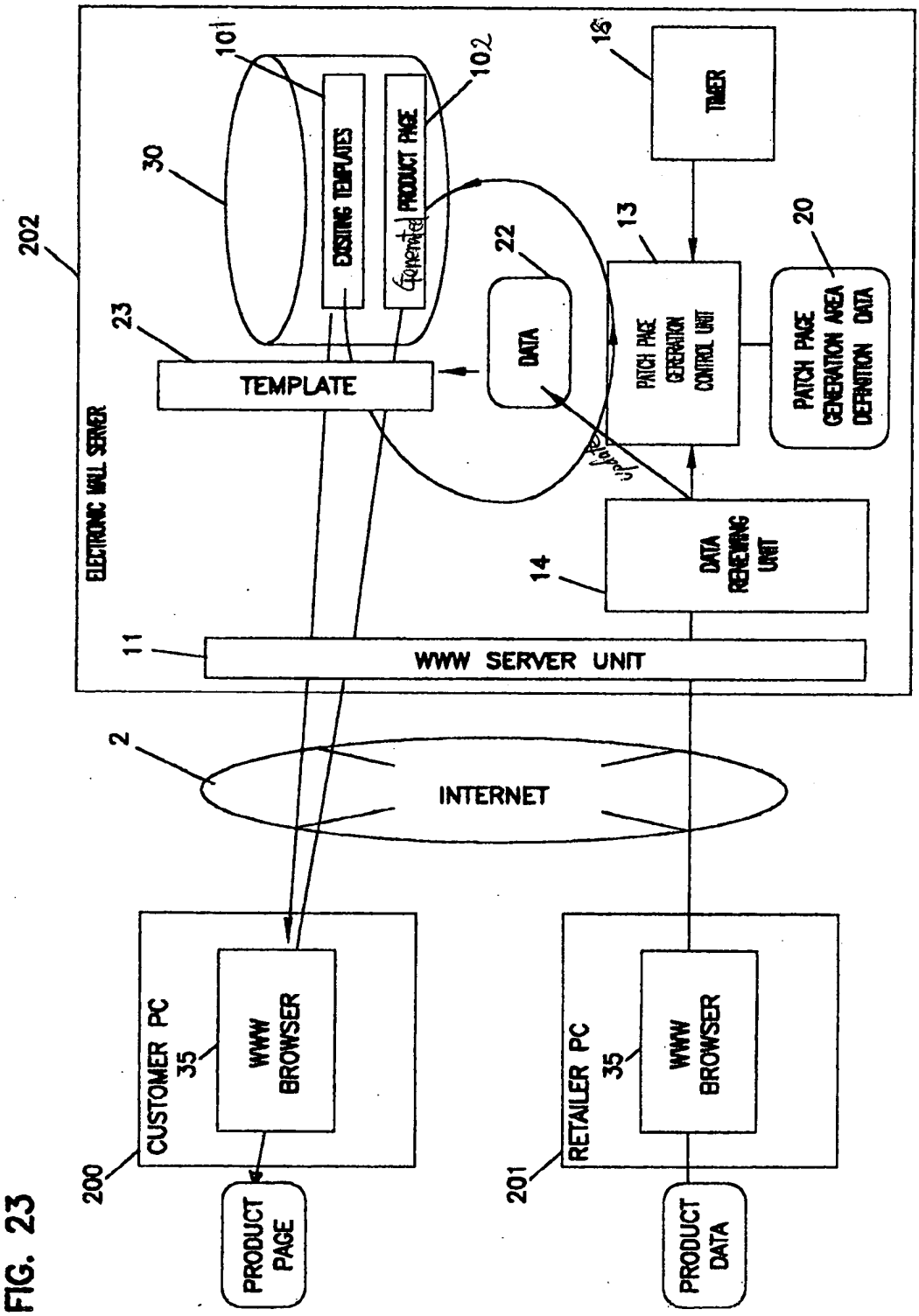
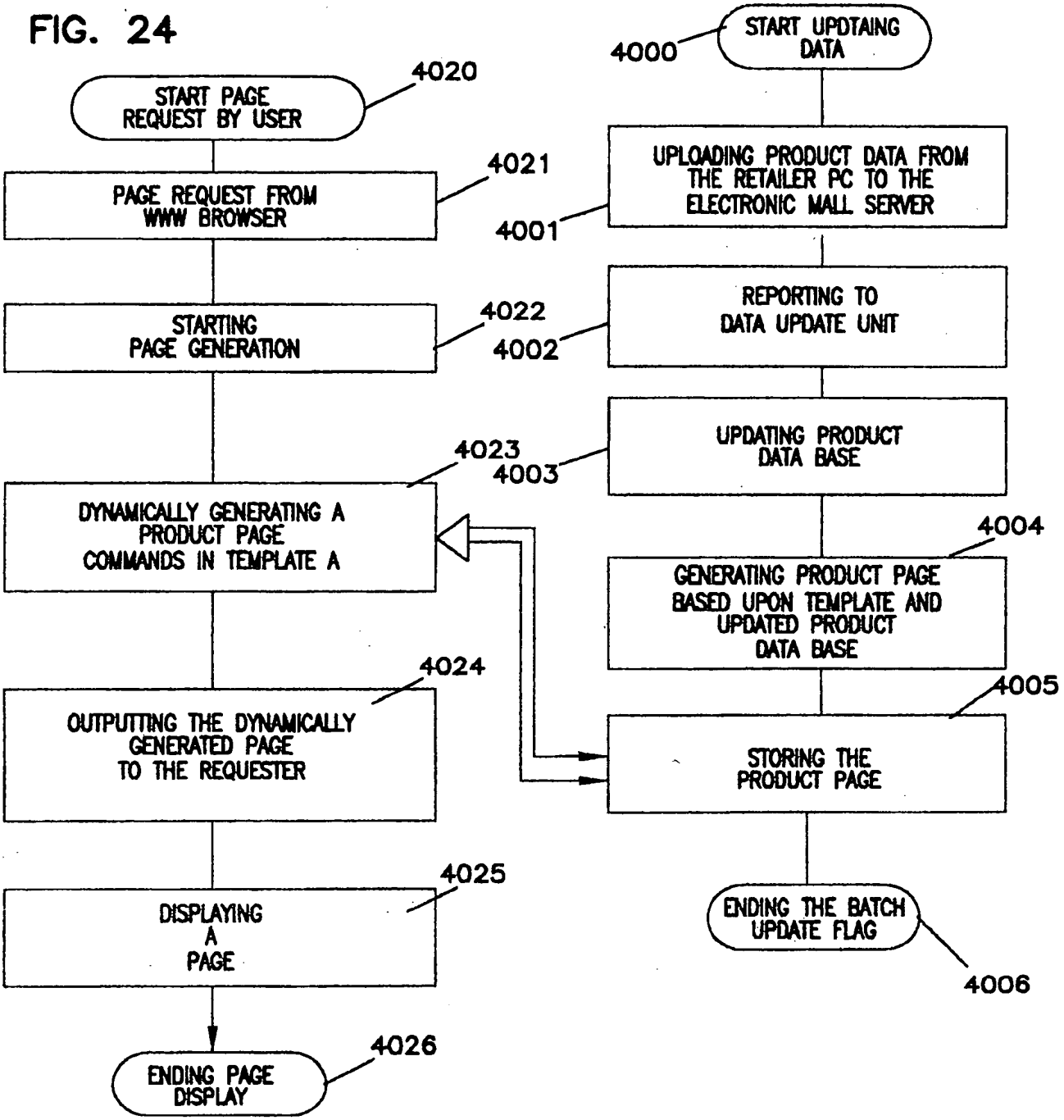

202
ELECTRONIC MALL SERVER
101
EXISTING TEMPLATES
102
PRODUCT PAGE
30
TEMPLATE
23
DATA
22
TIMER
16
PATCH PAGE GENERATION CONTROL UNIT
13
PATCH PAGE GENERATION AREA DEFINITION DATA
20
DATA RENEWING UNIT
14
WWW SERVER UNIT
11
INTERNET
2
CUSTOMER PC
200
WWW BROWSER
35
PRODUCT PAGE
RETAILER PC
201
WWW BROWSER
35
PRODUCT DATA

FIG. 23

FIG. 24


START UPDTAING DATA
4000
UPLOADING PRODUCT DATA FROM THE RETAILER PC TO THE ELECTRONIC MALL SERVER
4001
REPORTING TO DATA UPDATE UNIT
4002
UPDATING PRODUCT DATA BASE
4003
GENERATING PRODUCT PAGE BASED UPON TEMPLATE AND UPDATED PRODUCT DATA BASE
4004
STORING THE PRODUCT PAGE
4005
ENDING THE BATCH UPDATE FLAG
4006
START PAGE REQUEST BY USER
4020
PAGE REQUEST FROM WWW BROWSER
4021
STARTING PAGE GENERATION
4022
DYNAMICALLY GENERATING A PRODUCT PAGE COMMANDS IN TEMPLATE A
4023
OUTPUTTING THE DYNAMICALLY GENERATED PAGE TO THE REQUESTER
4024
DISPLAYING A PAGE
4025
ENDING PAGE DISPLAY
4026